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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,656	12/31/2003	Xianping Ge	0026-0068	2826

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EXAMINER

LIE, ANGELA M

ART UNIT	PAPER NUMBER
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2163

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06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/748,656

Applicant(s)

GE ET AL.

Examiner

Angela M. Lie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-14,16-24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11,14,16-24 and 26-31 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 1, 19, 20, 22 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The phrase "identifies an extent or amount to which geographically-based search results are relevant to the query" is held indefinite, because it does not allow one skilled in the art to clearly deduce how this extent or amount of relevancy is obtained. Furthermore, the instant specification does not enable one skilled in the art to calculate this relevancy score, therefore this limitation renders claim indefinite.
4. For the purposes of the examination, the examiner interprets location sensitivity score as the geographical location of the search result.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

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by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. **Claims 1, 3, 7, 14, 16-24, 19-24 and 26-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Gailey et al (US Publication No. 2005/0027591).**

As to claims 1, 19, 20, 22 and 27, Gailey discloses a method comprising: receiving a search query (paragraph 97, lines 9-11); determining a location associated with the query (paragraph 88); determining a location sensitivity score that identifies an extent or amount to which geographically based search results are relevant to the query (wherein first query is processed for instance "Burger King" (paragraph 78) and then the results are sorted based on their geographical location with respect to the requester (paragraph 81)); determining topical scores for a set of documents based, at least in part, on the query (paragraph 73, wherein the results are listed and ranked partially based on query, because if those results would not match the query they would not be listed at all); determining a distance score for each document in the set of documents based, at least in part, on document location associated with the document, the location associated with query, and the location sensitivity score (paragraph 81); and ordering the set of documents as a function of both the topical scores of the set of documents

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and the distance scores of the set of documents (paragraphs 72 and 73, wherein the presented result are associated with the user's query, for instance "burger king").

As to claims 3 and 7, Gailey discloses the method wherein the function depends on the topical score and the distance score of each document in the set of documents (paragraphs 73 and 97, wherein the results are collected in response to inputted query and those results can be arranged in the order based on the geographical scores, i.e. closer distance would be associated with a better choice).

As to claim 7, score is considered a weighting.

As to claim 14, Gailey discloses the method wherein the ordering the set of documents includes: generating an overall score (the final ordering, which is based on the submitted query and geographical location) for each of the documents in the set of documents based, at least in part, on the topical score (paragraph 97) and the distance score (paragraph 73), and ordering the set of documents based, at least on part, on the overall scores.

As to claim 16, Gailey discloses the method wherein the location sensitivity score depends, at least in part, on at least one of a keyword, a topic, the query, the location associated with the query, or a user issuing the query (location sensitivity score corresponds to distance therefore this score is based on the location associated with the query, paragraph 81).

As to claim 17, Gailey discloses the method wherein the documents are web pages (paragraph 38).

As to claim 18, Gailey discloses the method wherein the documents are advertisements (paragraphs 54 and 56).

As to claim 21, Gailey discloses the server wherein the ranking component is further configured to order the set of documents based, at least in part, on the ranking of the set of documents (paragraph 73).

As to claim 23, Gailey discloses the method wherein determining location sensitivity data further includes determining geographical range for the identified topic (paragraph 81, lines 23-26).

As to claim 24, Gailey discloses the method wherein the location sensitivity data is determined based, at least in part, on user behavior with regard to prior search results (first results are obtained based on the inputted query and then the distance for each of those matches is calculated, therefore the location sensitivity score is based on the prior search).

As to claim 26, Gailey disclosed the method wherein the ranking at least one document in the set of documents is based, at least in part, on the location associated with the at least one document and the geographic range for the identified topic (paragraph 73).

As to claims 28 and 31, Gailey discloses the method for presenting advertisements relevant to a target document (paragraph 97, lines 13-17), comprising: analyzing the target document to identify a topic for the target document (wherein the topic is represented by a submitted query) and a location associated with the target document (paragraph 81, documents including information about the Burger King

restaurants having respective addresses); identifying targeting information for a plurality of advertisements (paragraph 97, searching for offers); comparing the targeting information to the topic to identify a set of potential advertisements (paragraph 107, wherein advertisements pertaining to the query are listed); determining a distance score for at least one advertisement in the set of potential advertisements using an advertiser location associated with the one advertisement and the location associated with the target document (paragraph 81, lines 18-20); ordering the set of potential advertisements based, at least in part, on the distance score of the at least one advertisement (paragraph 73); and presenting at least some of the ordered set of potential advertisements (paragraph 107, lines 9-10).

As to claim 29, Gailey discloses the method further comprising: ranking the set of potential advertisements based, at least in part, on the comparing; and wherein the ordering the set of potential advertisements includes re-ranking at least some of the set of potential advertisements (paragraph 73, wherein results returned based on the submitted query, are re-ranked based on their geographical locations).

As to claim 30, Gailey discloses the method wherein the location associated with the target document is based, at least in part, on a user that accesses the target document (paragraph 81, wherein the user's location is determined, in order to find the matches that are closest to the user's address).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 4-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gailey et al (US Publication No. 2005/0027591) in the view of Berkan et al (US Publication 200300743353).**

As to claims 4, 8, 9, 10 and 11, Geiley teaches all the limitations disclosed in claim 1, however he does not explicitly teaches the method wherein the topical score is higher for more relevant ones of the documents and a distance score is higher for ones of the documents with a document location nearer to the location associated with the query. Berkan teaches an answer retrieval technique wherein the results are ranked based on the score i.e. the most top result having the highest scores (paragraphs 42 and 150). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to rank results in the descending order, wherein the top position would have the highest score, as taught by Berkan, because majority of match calculating algorithms lead to positive result, wherein each matching criteria increases the overall matching score. Therefore, if the document matches the query very well, the score would be also high. Once the score is determined, the resulting documents can be put in order depending on their matching scores, therefore it would create additional complexity to reverse the matching scores so as to place the documents in the

ascending order. Such an action based on the additional calculations requirement would slow down the processing time.

As to claim 8, score is considered a weighting.

As to claim 9, as the score value for results based on a query and a distance varies, the weights being those scores inherently vary as well.

As to claims 10 and 11, wherein the results returned in response to the query have to have different scores and therefore weights, because otherwise there would be no purpose on generating duplicated results (paragraph 97 i.e appropriate matches).

As to claims 5 and 6, Geiley teaches the method wherein determining distance score for the document includes calculating a distance from the document location to the location associated with the query (paragraph 81, lines 17-20). Geiley does not explicitly teach however, that the function used for the calculation of the score is monotonic. Berkan teaches the answer retrieval technique wherein score calculating function shows the monotonic behavior (Figs 8A-8D). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use a monotonic function as taught by Berkan, in Geiley's searching algorithm because this would simplify calculations (constant polarity) and therefore minimize the processing time.

Allowable Subject Matter

10. **Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and further wherein the**

U.S.C 112 second paragraph deficiency regarding claim 1 also has to be overcome.

As to claim 12, the prior art does not teach the method as disclosed in claim 1, wherein a first document in the set of document includes a corresponding first topical score and first distance score, a second document in the set of documents includes a corresponding second topical score higher than the first topical score and second distance score lower than the first distance score, a third document in the set of documents includes corresponding third topical score higher than the first topical score and third distance score lower than the first distance score; and wherein the ordering the set of documents includes ordering the second document higher than the first document and the third document lower than the first document.

As to claim 13, the prior art does not teach the method as disclosed in claim 1, wherein a first document in the set of document includes a corresponding first topical score and first distance score, a second document in the set of documents includes a corresponding second topical score lower than the first topical score and second distance score higher than the first distance score, a third document in the set of documents includes corresponding third topical score lower than the first topical score and third distance score higher than the first distance score; and wherein the ordering the set of documents includes ordering the second document higher than the first document and the third document lower than the first document.

Response to Arguments

11. Applicant's arguments with respect to claims 1,3-14, 16-24 and 26-31 have been considered but are moot in view of the new grounds of rejection.

The Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Heumann (US Publication 2001/0034660) discloses a method and an apparatus for searching plurality of offers and ordering them according to the distance from the user to the advertised location.

Inquiry

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

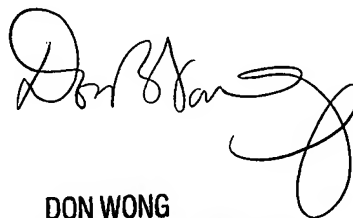
14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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